Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently Amended) A method of communicating data, via a device driver, between an application and an interface having ~~at least one~~ a feature to which ~~a corresponding~~ an interface identifier is assigned, the assignment of the interface identifier to the feature being susceptible to change after ~~at least one~~ an event, the method comprising:

~~for at least one said feature,~~ storing a ~~corresponding~~ logical identifier corresponding to the feature;

providing the logical identifier to the application for directing communication associated with the ~~corresponding~~ feature between the device driver and the application; and

maintaining correspondence between the ~~or each~~ logical identifier and the ~~or each~~ feature independently of the interface identifier assigned to the ~~or each~~ feature so that communication between the application and the device driver directed using ~~a given~~ the logical identifier remains associated with the ~~corresponding given~~ feature following a change in the assignment of the ~~corresponding~~ interface identifier to the feature.

2. (Currently Amended) A method according to Claim 1, wherein communication between the interface and the driver is directed based on the ~~or each~~ interface identifier.

3. (Currently Amended) A method according to Claim 1, including compiling a list of logical identifiers and corresponding interface identifiers for ~~all features meeting pre-determined criteria.~~ the feature if the feature meets a predetermined criterion.

4. (Currently Amended) A method according to Claim 1, wherein the device driver is arranged to communicate the interface identifier assigned to ~~a~~ the logical identifier to the application on request.

5. (Currently Amended) A method according to Claim 1, wherein the device driver is arranged to accept requests from ~~an~~ the application to define connections between physical devices to ~~the~~ a bus using ~~at least one~~ the logical identifier in place of ~~an~~ the interface identifier.

6. (Previously Amended) A method according to Claim 1 wherein the application is arranged to communicate with the device driver via device manager means.

7. (Currently Amended) A method according to Claim 1 wherein the ~~at least one said~~ feature of the interface comprises a peripheral connected to the interface and the ~~corresponding~~ interface identifier comprises ~~the~~ a physical address assigned to ~~that~~ the peripheral, the logical identifier comprising a logical address assigned to the peripheral.

8. (Currently Amended) A method according to Claim 7, wherein said maintaining correspondence includes interrogating ~~each~~ the peripheral to which ~~a~~ the logical address

is assigned to determine the physical address assigned to the peripheral following a bus reset.

9. (Currently Amended) A method according to Claim 7, wherein the driver device is arranged to communicate the interface identifier assigned to ~~a~~ the logical identifier to the application on request, and ~~wherein~~ further comprising communicating the interface identifier for ~~a given~~ the peripheral ~~comprises~~ by communicating the physical address of the peripheral and ~~also includes~~ communicating a unique node identifier containing further information identifying the peripheral.

10. (Currently Amended) A method according to Claim 1, wherein the ~~at least one said~~ feature of the interface comprises a channel of defined parameters available via the interface and the ~~corresponding~~ interface identifier comprises ~~the~~ an interface channel number, the logical identifier comprising a logical channel identifier.

11. (Currently Amended) A method according to Claim 10, wherein the device driver is arranged to receive a request from ~~an~~ the application to allocate ~~a~~ the channel of defined parameters and to return ~~a~~ the logical channel identifier if allocation is successful.

12. (Currently Amended) A method according to Claim 10, wherein the device driver is arranged to accept a preferred interface channel number and to allocate ~~the~~ a preferred

interface channel if available, and to allocate a free channel if the preferred interface channel is not available ~~or~~ if ~~no~~ the preferred interface channel is not specified.

13. (Currently Amended) A method according to Claim 10, wherein the device driver is arranged to receive an identifier of a preferred interface channel, to recognise a pre-determined key in place of a valid interface channel number as indicating that ~~no~~ the preferred interface channel is not specified, and to report an error to the application if other invalid interface channel numbers are specified.

14. (Currently Amended) A method according to Claim 10, wherein the device driver is arranged to communicate the interface channel number to the application, and at least one other parameter selected from: ~~the~~ a maximum rate allocated to the channel; ~~the~~ a rate currently available; ~~the~~ a number of connections ~~(if any)~~ using the channel; and ~~the~~ identifiers of each connection using the channel.

15. (Currently Amended) A method according to Claim 1 wherein the device driver is arranged to accept requests from ~~an~~ the application to define one or more connections between physical devices attached to the interface by reference to logical addresses and logical channel identifiers.

16. (Previously Amended) A method according to Claim 1 wherein the device driver is arranged to establish at least a broadcast connection.

17. (Currently Amended) A method according to Claim 1 wherein the device driver is arranged to signal ~~one or more events~~ the event to ~~an~~ the application, the ~~events preferably~~ event including reset of ~~the~~ a bus ~~(preferably beginning and end of reset) and~~ or a change in a bus topology or a change in a channel or a change in connection parameters.

18. (Currently Amended) A device driver for effecting communication between an the application and an interface having ~~at least one~~ a feature to which an interface identifier is assigned, the ~~or each~~ interface identifier being liable to change after ~~at least one~~ an event, the device driver comprising:

means for storing ~~at least one~~ a logical identifier corresponding to ~~a respective~~ an interface identifier;

means for providing the logical identifier to the application for directing communication associated with the ~~corresponding~~ feature between the device driver and the application; and

means for maintaining correspondence between the ~~or each~~ logical identifier and the ~~or each~~ feature independently of the interface identifier assigned to the ~~or each~~ feature so that communication between the application and the device driver directed using ~~a given~~ the logical identifier ~~can remain~~ remains associated with the ~~corresponding~~

~~given~~ feature following a change in the assignment of the ~~corresponding~~ interface identifier to the feature.

19. (Currently Amended) A device driver according to Claim 18, wherein the device driver is implemented in software~~, preferably executable by processing means which runs the or each application~~.

20. (Currently Amended) A device driver according to Claim 18, wherein the device driver is arranged to compile a list of logical identifiers and corresponding interface identifiers for ~~all features meeting pre-determined criteria.~~ the feature if the feature meets a predetermined criterion.

21. (Currently Amended) A device driver according to Claim 18 including means for communicating the interface identifier assigned to ~~a~~ the logical identifier to the application on request.

22. (Currently Amended) A driver according to Claim 18, including means for accepting a request from ~~an~~ the application to define connections between physical devices connected to ~~the~~ a bus using the ~~at least one~~ logical identifier in place of ~~an~~ the interface identifier.

23. (Currently Amended) A device driver according to Claim 18, wherein ~~at least one said~~ the feature of the interface comprises a peripheral connected to the interface and the

~~corresponding~~ interface identifier comprises ~~the~~ a physical address assigned to ~~that~~ the peripheral, the logical identifier comprising a logical address assigned to the peripheral.

24. (Currently Amended) A device driver according to Claim 23, arranged to interrogate ~~each~~ the peripheral to which ~~a~~ the logical address is assigned to determine the physical address assigned to the peripheral following a bus reset.

25. (Currently Amended) A device driver according to Claim 23, including means for communicating the interface identifier assigned to ~~a~~ the logical identifier to the application on request, and ~~wherein the~~ further comprising means for communicating the interface identifier for ~~a given~~ the peripheral ~~comprises means for~~ by communicating the physical address of the peripheral and ~~also includes~~ means for communicating a unique node identifier containing further information identifying the peripheral.

26. (Currently Amended) A device driver according to Claim 18, wherein ~~at least one said~~ the feature of the interface comprises a channel of defined parameters available via the interface and the ~~corresponding~~ interface identifier comprises ~~the~~ an interface channel number, the logical identifier comprising a logical channel identifier.

27. (Currently Amended) A driver according to Claim 26 including channel allocating means arranged to receive a request from ~~an~~ the application to allocate ~~a~~ the channel of

defined parameters and to return ~~a~~ the logical channel identifier if allocation is successful.

28. (Currently Amended) A device driver according to Claim 27, wherein the channel allocating means is arranged to accept a preferred interface channel number and to allocate ~~the~~ a preferred interface channel if available, and to allocate a free channel if the preferred interface channel is not available or if ~~no~~ the preferred interface channel is not specified.

29. (Currently Amended) A device driver according to Claim 27, wherein the channel allocating means is arranged to receive an identifier of a preferred interface channel, to recognise a pre-determined key in place of a valid interface channel number as indicating that ~~no~~ the preferred interface channel is not specified, and to report an error to the application if other invalid interface channel numbers are specified.

30. (Currently Amended) A device driver according to Claim 26, including means for communicating the interface channel number to the application, and at least one other parameter selected from: ~~the~~ a maximum rate allocated to the channel; ~~the~~ a rate currently available; ~~the~~ a number of connections ~~(if any)~~ using the channel; and ~~the~~ identifiers of each connection using the channel.

31. (Currently Amended) A device driver according to Claim 18 including means arranged to accent requests from ~~an~~ the application to define one or more connections between physical devices attached to the interface by reference to logical channel identifiers ~~and, in the case of a request to define a point to point connection, by reference to logical addresses of the peripherals~~.

32. (Currently Amended) A device driver according to Claim 18, including means arranged to establish at least a broadcast connection on request by ~~an~~ the application.

33. (Currently Amended) A device driver according to Claim 18, including means for signalling ~~one or more events~~ the event to ~~an~~ the application, the ~~events preferably~~ event including reset of ~~the~~ a bus ~~(preferably beginning and end of reset)~~ and a change in a bus topology or a change in a channel or a change in connection parameters.

34. (Canceled)

35. (Currently Amended) A data processing system according to Claim ~~34~~ 47 implemented in a receiver/decoder which includes means for receiving broadcast data, the interface means being arranged for connection to a digital video recorder or a digital display device or a computer for display or storage of at least a portion of the received data.

36. (Currently Amended) A receiver/decoder according to Claim 35, wherein the device driver means is arranged to cooperate with further device driver means for modifying the ~~received~~ broadcast data ~~stream~~ to produce a modified data stream for passing to said interface means.

37. (Currently Amended) A receiver/decoder according to Claim 35, wherein the interface means conforms to ~~the~~ an IEEE 1394 standard or a variant thereof.

38. (Currently Amended) A receiver/decoder according to Claim 35, wherein the application is run in an interpreted language and the device driver means is compiled.

39. (Currently Amended) A receiver/decoder according to Claim 35, wherein the device driver means is arranged to transmit commands for controlling ~~a~~ the digital video recorder from the application and/or to receive data concerning ~~the~~ information stored on the digital video recorder.

40. (Currently Amended) A receiver/decoder according to Claim 39, wherein the data ~~to be communicated includes data~~ is in a MPEG format.

41. (Canceled)

42. (Canceled)

43. (Canceled)

44. (Canceled)

45. (Canceled)

46. (Canceled)

47. (New) A data processing system comprising:

run-time engine means for running an application;

interface means for connection to a device, the interface means having a feature to which an interface identifier is assigned, the interface identifier being liable to change after an event; and

device driver means for effecting communication between the application and the interface means, the device driver means comprising:

means for storing a logical identifier corresponding to an interface identifier,

means for providing the logical identifier to the application for directing communication associated with the feature between the device driver means and the application, and

means for maintaining correspondence between the logical identifier and the feature independently of the interface identifier assigned to the feature so that communication between the application and the device driver means directed

using the logical identifier remains associated with the feature following a change in an assignment of the interface to the feature.